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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

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Safe Farming in the Southern States in 1919

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SAFE FARMING IN THE SOUTHERN STATES IN 1919

THE WAR IN EUROPE has come to a sudden end and the country is confronted with the problems of peace rather than the problems of war. Nineteen hundred and nineteen will be a year of readjustment of activities not only but also of motives and purposes. In times of great danger, such as the crisis just passed, patriotic men will subordinate their profits to the supreme needs of the nation. With the return of peace, the usual economic motives will be controlling and should be controlling, since the interests of all the people are best served when normal returns for the labor of every man are secured. Hence, in considering the program for the Southern States in 1919, we must consider a safe and enduring system of agriculture which will maintain soil fertility and be as permanently and as universally profitable as possible for those engaged in it.

While this principle will govern, we must remember that no radical changes took place in American agriculture on account of the war. Each farmer was urged to do more of the things he knew best how to do. The great accomplishments of the past two years were the result of every farmer working a little harder at his regular job. With abundant patriotism they did what was necessary and helped greatly in winning the war. The food produced in the South released food from the Western States for the Army and for the Allies.

A BALANCED AGRICULTURE.

A well balanced system of agriculture has been the ideal held up to the South for many years past. The safety and security of the Southern people depend greatly upon the production of the food necessary to feed the people; upon a reasonable livestock industry to balance the farming by economizing labor and consuming otherwise waste products; and upon a sufficiently diversified cropping system to guarantee an increasing in place of a decreasing soil fertility. Such a system is nothing more nor less than the system of safe farming which has been taking a strong hold in the Southern States during the last few years. All agricultural workers in the South have agreed that no one-crop system ever made a people prosperous. The chances are too great when the eggs are all put in one basket. It makes no difference whether the disaster results from war, the boll weevil, the pink bollworm or other insect pests, plant disease, failing transportation, excessive rain, or drought, that system is safest which adheres religiously to a plan of farming sufficiently diverse to produce always food for people and feed for livestock, to utilize

the labor upon the farm the maximum number of days in a year, and to produce for marketing more than one product of the farm for its cash income.

In considering a program for the year 1919, each State should give earnest consideration to a few fundamental principles:

(1) The planting of a disproportionately large acreage in any one crop introduces speculative features which unbalance systems of farming. Such planting increases the risk of loss through bad weather, destructive insects and diseases, and exposes the farmer unduly to the hazard of possible adverse conditions. If indulged in throughout any region with such a crop as cotton it makes the farmers of that section too dependent upon world markets, often with disastrous results. It also makes them unnecessarily and uneconomically dependent upon other sections for foods and feed-stuffs.

(2) Each farm, each community, and each section should produce, as far as possible, its own food and feed for the sake of economical production, and to save transportation costs and intervening profits where the purchase must be made from distant sections. In other words, the food and feed of the South should be produced on the farms of the South.

(3) In stimulating increased food production the emphasis should be on non-perishable staple crops which can be increased beyond local needs in communities where they can be produced profitably and which can be marketed to advantage.

(4) The production of perishable crops should be increased above normal only as facilities for transportation and marketing are assured.

The situation in the South in 1919 will be a difficult one, but the experiences of the past season ought to lead us to approach the task with some confidence. You will remember that throughout the planting season of 1918 the price of cotton stood at 30 cents a pound and above. In the appendix to this circular will be found a table showing the comparative acreage in most of the standard farm crops of the South compared with the 1917 acreage. The increased acreage in cotton of a little over 6 per cent occurred in Alabama, Louisiana, Mississippi and Oklahoma, mainly. In three of these States low previous acreage, due to the boll weevil, warranted some increase, while in Oklahoma the disastrous winter and the protracted drought killed so many acres of winter wheat and other small grain that an increase in acreage of cotton seemed inevitable. This same table shows, however, that the farmers in practically every State in the South, with a shortage of labor and with unusual difficulties of operation, planted increased acreages in the main

food crops. It should be noted also that the livestock of the South has been considerably increased, particularly the production of hogs, cattle, and sheep, and increased livestock production demands an increased production of food crops and forage.

Other tables in the appendix give acreage and production of the standard farm crops of the South since 1909, for the purpose of showing the steady increase in food and feed crops and the fluctuating acreage in cotton. This is a record every Southern farmer should have. It shows what Southern farmers did to help win the war.

FOOD PLUS COTTON EQUALS PROSPERITY.

If the Southern farmer is in a better financial condition today than he has been for some years past, it has resulted from a better balanced husbandry and the production of more food and feed crops and livestock, as well as from the high prices for his cotton, tobacco, rice, and other cash crops. If food and feed are not produced upon the farms and the acreage is devoted too largely to cotton both food and feed must be purchased; a comparison of the purchasing power of cotton during the past year and its purchasing power during the years before the war will show that cotton did not purchase materially more of food and feed at retail prices in the South at 30 cents a pound in 1918 than at 12 cents a pound prior to August 1, 1914.

The rule followed in the South in the last few years is still good. Farmers and bankers are urged again to compare the purchasing power of their cotton with the retail values of food and feed. Such a comparison will at once convince the ordinary man of the necessity of producing food and feed in the South to supply all our people and the increasing livestock.

Without going elaborately into the figures it is only necessary to say that what was a safe, economic, and advisable system of farming before the war was safe, economic, and advisable during the war, and will be safe, advisable, and, in the long run, most profitable after the war, and that is the system already described.

Since the fall of 1914 cotton farmers of the South have profited from the steady rise in the general level of all prices, including cotton. The supplies for the year, during this period of rising prices, were purchased at one level and paid for in the fall or winter out of cotton sold at a higher level. If the war should be followed by a general decline of prices, the reverse of the situation indicated above will confront the cotton farmer. In other words, he will purchase at high prices the supplies for making the crop, and also foods and feedstuffs, if he does not produce a sufficient quantity of them, and possibly pay for them in the fall or winter from his cotton sold

at lower prices. The chances for profit during a period of increasing prices are greater than during a period of decreasing prices. These are facts which the cotton farmer should remember during the period following the war.

That the value of farm products in the eleven cotton States has undergone a distinct change in the past few years is shown by the following table:

Estimated value of Crops in Eleven Cotton Producing States, Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, 1910 to 1918.

COTTON COMPARED WITH 12 OTHER CROPS.

Year.	Value of 13 crops, ¹ cotton included.	Value of cotton crop, lint only (U. S.).	Value of 12 crops, cotton excluded.
1910.....	\$1,444,302,000	\$ 829,407,000	\$ 623,895,000
1911.....	1,338,496,000	687,888,000	650,608,000
1912.....	1,483,704,000	817,055,000	666,649,000
1913.....	1,615,996,000	862,708,000	753,288,000
1914.....	1,284,600,000	549,036,000	735,564,000
1915.....	1,458,221,000	631,460,000	826,761,000
1916.....	2,153,406,000	1,122,295,000	1,031,111,000
1917 ²	3,155,691,000	1,566,198,000	1,589,493,000
1918 ²	3,262,617,000	1,616,207,000	1,646,410,000

COTTON COMPARED WITH ALL CROPS.

Year.	Value of all crops, cotton included.	Value of cotton crop, lint and seed (U. S.).	Value of all crops, cotton excluded.
1914.....	1,698,583,000	677,986,000	1,020,597,000
1915.....	1,922,889,000	799,360,000	1,123,529,000
1916.....	2,835,713,000	1,381,365,000	1,454,348,000
1917 ²	4,182,612,000	1,894,876,000	2,287,736,000
1918 ²	4,346,181,000	1,956,207,000	2,389,974,000

¹ Corn, wheat, oats, barley, rye, buckwheat, flaxseed, rice, potatoes, sweet potatoes, tame hay, tobacco, and lint cotton.

² December, 1918, Bureau of Crop Estimates.

All figures from Crop Report and U. S. Census.

In some sections of the cotton area a plan of farming known as "fifty-fifty" farming has been advocated. By this is meant one-half of the acreage per farm to cotton and one-half to food and feed crops. In many sections of the South such a rule is not far from correct, but it is felt that no definite and prescribed acreage plan can be given for all sections. Each farm in its management and operation is so dependent upon other factors that it would be unsafe to lay down such a rule except as a kind of general guide. In some of the smaller farm areas it is probable that the percentage of cotton may well be reduced below 50 per cent, while 50 per cent in food and feed crops is probably too high for large plantation purposes. Each farm and each community will have to work out this problem for itself.

RICE FARMING.

In rice producing areas it is wise again to give consideration to diversification. The introduction of livestock and other food and

feed crops as a part of the farm plan of every rice farmer is important for the future security of the industry. Rice farmers are pretty well organized and have their marketing facilities well in hand. Increased acreage might be warranted by bringing in new land as farms if the dangers of single-cropping, both as to soil fertility and market conditions, can be avoided by more livestock and forage crops.

FOOD PRODUCTION STILL IMPORTANT.

Not only is the food problem still a paramount problem and the hunger of the world still unappeased, but especially are we going into an era of uncertainties. No one knows just what the future holds for us. No man is wise enough to predict with accuracy whether prices will be maintained or not. He is a very unwise man, therefore, who makes up his mind to speculate at such a time. The safest course is to secure first the living of the people and then a constant and well equalized production which will be the surest guaranty of prosperity.

DOES SAFE FARMING APPLY TO NON-COTTON TERRITORY?

There are States and areas of the South where single-crop farming is not a serious menace. In Maryland, Virginia, West Virginia, Kentucky, middle and eastern Tennessee and certain other regions, the agriculture is fairly well diversified, yet the principles of safe farming apply to these sections as well as to others. The maintenance of soil fertility, the home living from the soil, and the selection of a number of products from the farm to exchange for cash in the markets of the world are sound principles in any section. In the regions mentioned above the greatest possible attention should be given to the size, extent and diversity of farm operations, to farm management plans which will utilize the labor, tools and equipment to the fullest possible extent, and to the business and marketing side of farming. A plan best calculated to produce a permanent and profitable agriculture should be developed.

A SAFE FARMING PROGRAM.

For the sake of considering the items carefully, let us repeat a safe farming program. It consists of:

(1) A good home garden for every farm family and every town and village family in the South to supply the home needs for the maximum number of days in a year with a sufficient surplus to be canned, stored, or dried for future use. In this home garden should be included an ample supply of Irish and sweet potatoes for home use. On every farm where possible there should be a small patch of either cane or sweet sorghum to produce the home supply of sirup. The production of honey for home use should be stimulated.

(2) The production of corn on Southern farms should be fully maintained and the acreage increased on all farms and in all sections which do not now produce a sufficient quantity for home use, with the exceptions noted below. Corn is the main dependence of the South for food and feed. There has been a gradual increase in acreage for some years past (see table attached). An increase necessary to insure a sufficient supply for feed for the increased livestock as well as for food for the people should be given careful consideration.

Grain sorghums.—In connection with corn production we should consider the grain sorghums. It ought to be pretty clear to farmers in western Texas and Oklahoma that corn is an unsafe crop on most of the lands in that territory. In all of the drier sections of Oklahoma and Texas there should be an increased planting of grain sorghums. The planting of corn in west Texas and Oklahoma should be abandoned except on land which produced a fair return of sound corn in 1918. If there is any increase in corn acreage in either Texas or Oklahoma it should be in the extreme eastern section of both States. The increased demand for grain for food and feed should be met by an increased acreage of grain sorghums.

(3) Small grain acreage, especially wheat and rye, has been increased according to a program undertaken for fall planting. It is unnecessary to comment on this program further except to say that where spring oats have proven successful in past years reasonable planting to this crop may well be considered as a part of the spring program. Rice production is mentioned above.

(4) The production of hay and forage crops necessary to supply amply the livestock on the farms of the South for one year, with an excess for the sake of safety and for city and town consumption, should be a part of the program throughout the entire territory. In planting for hay and forage production special attention must be given to the summer legumes, velvet beans, cowpeas, soy beans, and peanuts.

Wherever they grow successfully an increased acreage in velvet beans in North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Arkansas, and Texas, to the largest possible extent, is advisable not only for production of hay and forage, but for the improvement of the soil. If not a single bean is harvested except for seed, the farmer will be amply repaid in the increased productivity of the land for another year. This crop also requires practically no work, as it is raised in the corn.

Soy beans ought to be increased in acreage, especially for hog production. In many sections this crop has proven more advantageous for hog production than either peanuts or cowpeas.

Cowpeas should be planted in the corn or after oats, both for seed and for hay, especially in the territory where velvet beans can not be grown.

Peanut acreage has greatly increased in the South in the past few years. To the extent of the farmer's need for feed for his increased hog production, acreage in peanuts may well be increased. In territory where they have proven successful increases should be advocated mainly by extending production to farms beginning hog production, but on which peanuts have not been grown. Acreage for

commercial purposes should only be increased as fair contract market prices would seem to warrant. This is a matter which should be approached with caution.

Acreage in clover and alfalfa is generally a matter for the fall seeding program, but no plan is complete for the year without these valuable crops for soil improvement, for grazing, and for hay. In all sections where these crops succeed they should form a part of the crop rotation.

(5) The South should increase its production of meat, eggs, and milk. The production of hogs, cattle, and poultry is now on the increase. In a statement recently issued by the Secretary of Agriculture he says:

“Two things seem to be clear, one is that for a considerable period the world will have need particularly of a larger supply than normal of livestock and especially of fats. We should not fail, therefore, to adopt every feasible means of economically increasing our livestock products. As a part of our program we should give due thought to the securing of an adequate supply of feedstuffs and to the eradication and control of all forms of animal disease.”

With the abundance of roughage available at all times, with the possibility of from two to three crops on the same land each year, with the diversity of crops, especially legumes, which can be produced for feeding purposes, and with its large production of concentrates such as cottonseed, velvet bean, peanut, and soy bean meal, the South should place livestock as a permanent part of its agricultural program under any and all circumstances. Most of the Southern States have undertaken programs of increased production of hogs, cattle, and poultry. This requires careful planning of the cropping system in order that there may be an increase in feed crops and forage necessary to supply the increased livestock. Hogs, cattle, and poultry should be a part of every farm plan. More careful feeding, breeding, and selection should be the rule, and the development of cooperative marketing in carload lots should be carefully fostered. Especially in cotton, tobacco, sugar cane, and rice regions livestock should be a source of cash income to the farm in addition to the main crop.

As milk constitutes one of the most important items of human food the South not only needs to develop the dairy industry, but should increase the number of milch cows so that there may be a minimum of two for each farm family. With the development of creameries and cheese factories the extra milk will bring a cash revenue much needed by the farmer.

(6) The South has four great cash crops which are limited to definite areas, namely—cotton, tobacco, rice, and sugar cane. In the development of a sound, enduring, and profitable agriculture the same general principles should be followed with regard to each of these crops. These principles are as follows:

(a) A cropping system which will maintain and build up soil fertility.

(b) The farm as nearly as possible self-supporting by producing the food for the family and the feed for the livestock.

(c) When the necessities of life have been amply provided for, produce these splendid crops as a source of cash income for the farm.

(d) For safety's sake we should not pin our faith entirely to one product. The cash income of the farm should be derived from a number of well-selected products.

COTTON.

If the cotton farmer of the South will only remember his experiences since 1914 he will be assisted in determining upon a plan for the future. He should remember that often in the past twenty years his greatest profit has come from actual misfortune, namely, a bad season and a short crop brought high prices, while a good season and a big crop brought low prices. He has seen disaster and great financial hardship from the boll weevil, from drought, from cotton wilt in some sections, from the red spider in others, and from the outbreak of the war in Europe. These experiences should be enough to convince any thinking man that speculation by the farmer in cotton acreage is an unprofitable business. While the gross return per acre in cotton raising is the largest of any single non-perishable farm crop, it is important to note that the cotton farmers do not stand near the top of the list in average wealth, and any comparisons between the all-cotton territory and highly diversified agricultural sections are all in favor of the diversified sections as against the cotton area.

In the face of the uncertainties of the present time, when world trade has been seriously disturbed and when the whole of civilization seems to be in a period of flux, is it not a wise plan to develop an agriculture which is safe for our farmers and which will maintain the supremacy in cotton production by safeguarding it by a better balanced system of agriculture?

The acreage in cotton for 1918 was exceeded only in 1911, 1913, and 1914. In 1911, with but 150,000 acres more than in 1918, the yield was 15,693,000 bales. Had it not been for the unfortunate season we would have had a very large crop of cotton in 1918. Any increase in the acreage planted in 1919 over 1918 with a good season would produce an enormous crop of cotton with all of the attendant risks which abnormally large production has always brought to the cotton planters. A good average acreage well tended, with good seasonal conditions, will produce a large crop. More attention should be given to the securing of better seed, better preparation of the soil, community production of uniform varieties and cooperative grading and marketing of the product, rather than the haphazard speculative planting of a large crop, poorly tended and of inferior quality.

RICE.

In the rice areas the principles laid down for cotton production should have a very strong bearing. The main consideration should be the orderly and sound development of the industry as pointed out above.

TOBACCO.

The safeguarding of the interest of the farmer by sufficient diversity to maintain soil fertility and produce the food and feed in ample quantities, with a source of income more diversified than the tobacco crop alone, are matters of primary consideration.

SUGAR CANE.

In the sugar industry economic livestock production should be given very careful consideration in the development of this industry in Louisiana, Texas, and Florida.

(7) The excess products of the farm outside of the main cash crop should be sold or exchanged to meet the living expenses of the family. A surplus of hogs, eggs, poultry, corn, hay, soy beans, peanuts, and such other farm products as are adapted to each locality should be produced for sale in limited quantities, besides the production of the main staple crop. A cash income throughout the year, a cash business instead of a credit business, and a bank account should be the aim.

SPRING PLANTING.

The United States Department of Agriculture and the State agricultural colleges cooperating have established a cooperative extension service in each of the Southern States and have county agents and county home demonstration agents in the majority of the counties. This system is familiar to the vast majority of farm families.

Food is still one of the greatest needs of this and other civilized nations, and every prompting of caution and safety should warrant a most intimate attention to this problem. Each State has prepared a program for the orderly development of the agriculture of the State on a sound basis. As a general rule there will be no requests for definite increases in acreage or production. These programs are based on the thought that farming must pay, that it must be safe under all conditions, and that sound agricultural practice must be continued. By repeated consultations it is evident that the State programs will be in substantial conformity to the general principles of safe farming as repeated for some years past by the States in cooperation with the department.

Organizations have been created in practically every county to cooperate with the county agent in carrying on this great campaign. It is hoped that the State and Federal authorities will be able to lay before the farmers in each community the food situation of the world, and assist them in getting together in community meetings to consider their own needs as well as the needs of the nation and adopting such plans as will best enable them to safeguard their own interests as well as the interests of the State, the nation, and the world.

The main cash crops of the South must be produced economically for sale in the markets of the world. To do this the department has advocated for some years past the balancing of the agriculture of the South by gradually and cautiously increasing the food and feed crops so as to supply the people of the South mainly if not entirely from food produced upon the farms of the South. To safeguard its increasing livestock most careful attention must be given to this whole problem of food and feed production. The Southern farmer should bear in mind the demoralization that might result if a largely increased acreage were planted, if weather conditions should be favorable and a very large crop should be secured. Market conditions would be upset and exchange values unbalanced.

Safe farming and a well-balanced agriculture will be the surest guaranty of prosperity for the year 1919.

APPENDIX.

ACREAGE IN 1913.

PERCENTAGE OF 1917 ACREAGE.

State	Corn	Wheat	Oats	Hay (tame)	Pota- toes	Sweet pota- toes	Cotton
Alabama	97	120	108	112	168	107	130
Arkansas	101	131	130	103	104	92	104
Florida	116	...	100	104	135	110	89
Georgia	102	109	91	100	120	103	103
Kentucky	100	112	100	110	94	94	...
Louisiana	105	...	95	100	200	97	106
Maryland	102	106	102	107	86	100	...
Mississippi	100	200	83	87	133	105	116
North Carolina	100	115	102	101	97	90	103
Oklahoma	91	96	110	101	103	101	109
South Carolina	98	120	135	100	125	100	104
Tennessee	96	105	100	110	85	95	102
Texas	100	94	106	100	112	104	102
Virginia	104	110	105	105	83	96	97
West Virginia	103	110	104	101	99	100	...
Average	99.6	104.1	106.6	105.	103.5	99.7	106.6

ACREAGE AND PRODUCTION SINCE 1909.

COTTON.

Acreage (thousands of acres), in heavy figures; production (thousands of 500-pound bales, excluding linters), in light figures.

State.	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	3471	3560	4017	3730	3760	4007	3340	3225	1977	2451
	1024	1194	1716	1342	1495	1751	1021	533	518	820
Arkansas	2218	2238	2363	1991	2502	2480	2170	2600	2740	2888
	714	821	939	792	1073	1016	816	1134	974	935
Florida	237	257	308	224	188	221	193	191	183	154
	54	59	83	53	59	81	48	41	38	25
Georgia	4674	4873	5504	5335	5318	5453	4825	5277	5195	5338
	1804	1767	2769	1777	2317	2718	1909	1821	1884	2100
Louisiana	920	975	1075	929	1244	1299	990	1250	1454	1560
	253	246	385	376	444	449	341	443	639	525
Mississippi	3291	2317	3346	2889	3967	3054	2735	3110	2788	3132
	1083	1263	1204	1046	1311	1246	954	812	905	1210
North Carolina	1359	1478	1624	1545	1576	1527	1282	1451	1515	1565
	691	706	1076	896	793	931	699	655	618	870
Oklahoma	1767	2204	2050	2665	3099	2847	1895	2562	2783	3095
	545	923	1022	1021	840	1262	640	823	959	550
South Carolina	2192	2534	2800	2695	2790	2861	2516	2780	2837	3047
	1100	1164	1649	1182	1378	1534	1134	932	1237	1500
Tennessee	735	765	837	783	865	915	772	887	882	940
	247	332	450	277	379	384	303	382	240	330
Texas	9360	10060	10943	11338	12597	11931	10510	11400	11092	11235
	2523	3049	4256	4880	3945	4592	3227	3726	3125	2580
Virginia	25	33	43	47	47	45	34	42	50	46
	10	15	30	24	23	25	16	27	19	26
Missouri	79	103	129	103	112	145	96	133	153	156
	45	60	97	56	67	82	48	63	61	70
All other .....	....	9	12	9	14	67	54	77	192	283
	2	10	17	11	32	64	33	58	85	159
United States.....	30938	32403	36045	34283	37089	36832	31412	34985	33841	35890
	10005	11609	15693	13703	14156	16135	11192	11450	11302	11700

CORN (Bushels).

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	2573	2856	3000	3150	3200	3264	3900	3825	4825	4636
	30696	51300	54000	54180	55360	55488	66300	47812	77200	67686
Arkansas	2277	2390	2390	2475	2475	2400	2700	2550	2674	2700
	37610	57360	49712	50490	47025	42000	62100	45135	64176	35100
Florida	606	630	636	655	675	700	800	820	800	880
	7024	8190	9286	8515	10125	11200	12000	12300	12600	14080
Georgia	3383	3585	3692	3910	4066	4060	4330	4000	4500	4590
	39375	51982	59072	53958	63023	56000	64950	62000	72000	68850
Kentucky	3436	3500	3600	3600	3650	3650	3500	3400	3650	3600
	83348	101500	93600	109440	74825	91250	105000	95200	114975	93600
Louisiana	1591	1782	1800	1805	1900	2000	2200	2134	1800	1850
	26010	42055	33300	32490	41800	38600	45100	44814	32400	29600
Maryland	647	660	670	670	670	663	710	675	700	686
	17924	22110	24455	24455	22110	24531	24850	26325	27300	24010
Mississippi	2173	2590	2850	3136	3150	3150	3550	3400	3786	3900
	28429	53095	54150	56840	63000	58275	67450	47600	77613	66300
North Carolina.....	2459	2650	2700	2893	2835	2835	2900	2600	2920	3065
	34063	49290	49680	51106	55282	57550	69900	48100	58400	64365
Oklahoma	5914	5735	5675	5448	4750	4600	3800	3950	3900	3250
	94283	91769	36888	101878	52250	50000	112100	53325	33150	24375
South Carolina	1566	1707	1799	1915	1975	1975	2130	2065	2150	2250
	20872	31580	32578	34278	38512	36538	35145	32008	40850	38250
Tennessee	3146	3400	3400	3332	3350	3350	3450	3000	3600	3500
	67682	88069	91129	88298	68675	89400	93150	78000	104400	84000
Texas	5130	6800	7300	7300	6800	6400	7100	6800	6900	6900
	75499	140080	69350	153300	163200	124800	166859	129200	75900	69000
Virginia	1860	1960	1980	1980	1980	1921	2125	2100	2100	2000
	38295	49980	47520	47520	51480	39380	60562	58800	56700	56000
West Virginia.....	676	700	707	725	732	732	800	740	860	800
	17119	18200	18170	24505	22692	22692	25200	22570	24000	24800
Total	37437	40939	42190	42879	42208	41040	43995	42059	45105	44607
	618229	856542	722881	891253	829359	788704	1001657	803189	871064	760016
Total, excluding Ky., Md., Va., & W. Va.....	30808	34119	35233	35904	35176	34074	36860	35144	37855	37521
	461543	664752	539136	685333	658252	610851	786045	690294	648089	561606

¹ Estimate December, 1918, Crop Report.

ACREAGE AND PRODUCTION SINCE 1909—Continued.

WHEAT.¹

Acreage (thousands of acres), in heavy figures; production (thousands of bushels), in light figures.

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ²	1918 ²
Alabama	14	28	30	36	32	31	100	110	93	140
Arkansas	114	336	345	318	374	403	1200	1045	930	1330
Florida	61	87	96	94	101	125	220	235	195	254
Georgia	526	1209	1008	940	1313	1625	2750	1880	3120	3048
Kentucky .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana	93	141	145	132	140	140	325	334	244	356
Maryland	753	1489	1740	1228	1708	1694	3575	3808	2074	3631
Mississippi	681	767	780	686	725	760	900	890	750	933
North Carolina	8739	9818	9906	6860	9860	12540	9900	8010	9000	12129
Oklahoma .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina	590	604	605	599	610	612	638	650	675	732
Tennessee	9463	10510	9378	8985	8113	13158	10272	10400	11475	11346
Texas .....	.....	5	9	8	1	1	5	6	14	30
Virginia	5	79	108	96	14	13	100	90	210	495
West Virginia.....	502	598	626	598	605	611	900	870	860	1015
Total	3827	6817	6636	5322	7078	7332	9810	9135	8600	7105
Total, excluding Ky., Md., Va., & W. Va.....	1069	1567	1122	1570	1759	2525	3350	3050	3160	2611
	14008	25542	8976	20096	27500	47975	38869	29585	35650	32899
	43	77	83	79	79	80	225	210	165	205
	311	847	946	727	972	920	2430	2226	1732	2255
	620	711	720	674	700	720	860	830	500	750
	6517	8319	8289	7077	8400	11160	9030	7885	4600	7500
	326	700	700	735	780	1082	1650	1200	1350	892
	2561	10500	6580	11025	13650	14066	25575	13200	16200	8920
	693	748	750	741	780	770	1230	1200	1200	1300
	8977	9574	9606	8596	10608	11296	16974	15240	15600	15600
	209	241	238	233	235	236	300	305	315	348
	2576	3012	2737	3378	3055	3540	4500	4422	4410	4942
	4991	6274	5901	6170	6533	7792	10703	9890	9461	9566
	57477	88034	65640	74648	92645	125722	134922	196926	113601	111200
	2723	2914	2531	2920	4123	5315	7635	6845	6524	6253
	28622	55129	34619	46829	61009	85188	93276	68854	73116	67183

¹ Acreage sown in fall next preceding.² December, 1918, Crop Report.

OATS.

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	257	283	286	260	325	390	600	600	420	428
Arkansas	3251	5236	5434	5200	6662	8580	11400	10500	7560	8132
Florida	197	207	205	175	240	260	375	350	340	442
Georgia	3213	5692	4100	3482	6369	6240	10125	7350	9520	11271
Kentucky	43	42	43	43	59	50	61	60	55	60
Louisiana	606	689	589	740	900	900	1220	900	770	1080
Maryland	412	404	404	364	420	450	905	860	550	600
Mississippi	6199	7353	8686	7571	9240	9000	17648	16770	8800	12000
North Carolina	174	175	170	150	160	175	250	300	310	400
Oklahoma	2406	4375	3128	4035	3168	3675	6500	6300	8060	9600
South Carolina	30	36	40	34	45	70	120	110	84	89
Tennessee	420	774	840	707	990	1610	3000	2090	1873	2000
Texas	49	47	46	45	45	43	45	46	47	60
Virginia	1161	1410	1242	1350	1260	1161	1530	1357	1457	1980
West Virginia.....	97	120	130	113	140	160	300	350	300	280
Total	1269	2304	2392	1966	2800	3680	6450	6300	5700	5600
Total, excluding Ky., Md., Va., & W. Va.....	228	221	219	204	230	250	350	390	275	325
	2782	4022	3614	3794	4485	4375	8050	6825	4400	6500
	609	699	909	936	1030	1100	1350	1160	1150	1380
	16606	25514	8181	23494	18540	30250	36450	14500	26450	33120
	324	336	345	324	360	375	525	500	400	500
	5745	7056	7038	6966	8469	7500	9975	9000	6000	11000
	342	342	315	258	300	350	357	260	290	325
	4721	7866	6142	5599	6300	8050	8746	5460	7250	8125
	440	688	737	865	1000	900	1500	1500	1425	1510
	7035	24080	18499	31140	32500	22500	53250	42750	37050	22197
	204	198	194	175	195	191	225	250	225	225
	2884	4356	3880	3885	4192	2960	5625	5875	5512	5175
	104	110	110	111	115	105	120	140	125	160
	1729	2772	2420	3108	2769	2100	3480	3220	3375	4320
	2510	2903	4150	4057	4655	4869	7683	6876	5996	6775
	69027	103490	76176	103037	108017	112581	183449	139197	133777	142100
	2979	3378	3630	3576	4140	4355	6443	6140	5289	5930
	51847	90577	65506	90659	97237	102685	166314	122445	115373	121025

¹ Estimate from December, 1918, Crop Report.

ACREAGE AND PRODUCTION SINCE 1909—Continued.

HAY (Tame).

Acres (thousands of acres), in heavy figures; production (thousands of tons), in light figures.

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	111	120	120	200	210	220	250	400	1448	1596
Arkansas	166	172	168	261	286	288	362	440	1158	1293
Florida	198	210	200	236	320	320	350	375	390	403
Georgia	218	284	230	352	384	336	560	469	573	524
Kentucky	19	19	18	43	47	48	51	75	100	105
Louisiana	26	25	23	54	63	65	61	94	110	120
Maryland	87	87	87	234	250	250	300	400	594	683
Mississippi	117	122	117	316	350	338	345	460	612	615
North Carolina.....	480	509	450	815	775	750	900	1080	975	1072
Oklahoma	653	645	428	1002	674	712	1260	1512	1268	1394
South Carolina.....	23	25	24	142	160	200	250	260	200	200
Tennessee	34	44	31	234	210	380	438	442	320	260
Texas	297	291	276	381	330	390	390	465	442	473
Virginia	356	393	199	575	191	448	468	688	552	639
West Virginia	83	100	100	201	220	210	250	275	302	347
Total	122	142	150	297	293	304	350	385	438	416
Alabama	175	175	161	293	320	320	350	440	506	590
Arkansas	242	262	169	381	410	368	618	572	572	681
Florida	900	900	810	335	450	450	550	550	574	564
Georgia	810	945	648	481	382	508	1265	935	918	677
Kentucky	66	67	64	194	210	210	220	255	250	260
Louisiana	81	84	69	223	244	242	286	332	270	286
Maryland	450	455	400	888	900	890	950	1050	1050	1200
Mississippi	675	637	400	1154	1080	960	1396	1449	1260	1620
North Carolina.....	618	618	606	387	400	450	450	480	528	581
Oklahoma	587	711	606	542	464	788	765	576	528	581
South Carolina.....	466	475	437	741	750	650	700	900	992	1142
Tennessee	676	565	280	889	952	468	945	1215	1151	1542
Texas	675	675	648	745	740	696	730	825	790	793
Virginia	844	810	428	1028	925	640	1095	1270	1003	1037
West Virginia	5648	5717	4401	5944	6142	5964	6691	7830	9141	10014
Total	5567	5841	3916	7789	7256	6845	10244	10839	10733	11688
Total, excluding Md., Va., W. Va., & Ky.....	2730	2776	2590	3262	3487	3478	3971	4560	5942	6529
	3108	3428	2611	4295	4214	4577	6476	6154	6759	7076

POTATOES (Bushels).

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	17	18	15	15	18	18	20	20	41	60
Arkansas	1360	1440	1170	1215	1512	1422	1600	1800	2952	4800
Florida	33	31	26	25	25	25	28	25	46	48
Georgia	2310	2604	1430	1750	1800	1500	2520	1625	3680	2400
Kentucky	5	6	10	11	12	13	12	18	25	35
Louisiana	175	540	909	1023	912	1040	960	1332	2275	3500
Maryland	10	10	12	12	12	13	16	15	19	23
Mississippi	810	820	864	936	972	780	1040	900	1596	1610
North Carolina.....	40	41	52	51	50	50	51	49	70	75
Oklahoma	3680	3772	2028	5151	2450	2250	6126	4116	6720	5625
South Carolina.....	16	20	22	20	25	24	28	25	25	55
Tennessee	1200	1100	1518	1460	1750	1680	1428	1625	1600	4345
Texas	35	36	39	37	43	44	44	43	60	50
Virginia	2800	3120	1755	4144	3741	3432	4268	4085	6000	4000
West Virginia	9	9	9	10	12	12	13	12	15	20
Alabama	783	765	747	890	960	960	1170	780	1170	1600
Arkansas	25	26	31	30	30	33	35	40	50	45
Florida	1850	2314	1488	2550	2400	1716	3150	2800	4500	4275
Georgia	27	26	29	29	32	32	35	34	36	37
Kentucky	1890	1560	540	1740	1920	2240	2975	1802	2484	1258
Louisiana	9	10	10	10	10	11	11	10	20	28
Maryland	765	900	700	900	800	770	880	750	1920	2856
Mississippi	20	30	38	38	38	35	26	36	52	50
North Carolina.....	2250	2400	1558	3344	2432	1505	3168	2052	4888	3500
Oklahoma	60	60	50	52	15	41	42	40	46	60
South Carolina.....	3000	3060	2850	3276	2340	2384	2730	2000	2760	3300
Tennessee	60	67	95	95	105	112	140	120	175	125
Texas	5520	6566	4275	8265	9870	7280	17500	16900	17325	11750
Virginia	39	41	41	47	43	43	50	48	55	60
West Virginia	3822	3772	1980	5264	3984	2592	5850	4224	6325	5220
Alabama	415	431	483	482	505	514	561	545	735	771
Arkansas	32515	35033	23803	41908	37843	31851	55665	48691	66195	69039
Florida	241	246	253	252	259	260	276	275	375	461
Georgia	16693	17503	13765	19084	17798	16297	21621	19366	29825	33444

¹ Estimate from December, 1918, Crop Report.

ACREAGE AND PRODUCTION SINCE 1909—Continued.

SWEET POTATOES.

Acreage (thousands of acres), in heavy figures; production (thousands of bushels), in light figures.

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	67	67	64	62	70	63	80	85	150	153
Arkansas	5315	5695	6208	6200	6650	5859	7230	6290	13500	14688
Florida	22	22	20	18	20	18	30	35	40	38
Georgia	1685	2156	1840	1584	1800	1710	3900	3185	4400	3420
Kentucky	22	22	21	21	21	19	23	25	35	36
Louisiana	2084	2376	2268	2352	2310	2280	2576	2500	3325	3960
Maryland	85	85	81	81	83	79	95	94	125	130
Mississippi	7426	7055	6561	7290	7221	6715	8075	7520	11625	11960
North Carolina.....	11	11	10	9	9	10	10	10	12	13
Oklahoma	1326	935	960	810	675	1050	1050	900	1140	1235
South Carolina.....	60	60	60	56	60	59	65	64	62	65
Tennessee	4251	5580	5400	4704	5100	5133	5980	5760	4898	4875
Texas	8	8	8	8	8	8	8	9	10	11
Virginia	1083	880	920	1000	1128	1000	1040	1134	1180	1430
West Virginia.....	57	57	55	52	55	50	75	77	85	89
Total	4428	5358	4675	5044	5390	4500	8250	6314	5525	8455
	84	81	77	75	80	76	85	87	90	81
	8493	8820	6322	6750	8900	6840	8925	9300	8550	8910
	5	5	4	4	6	6	12	13	15	15
	360	350	300	368	384	612	1380	962	1350	975
	50	50	48	48	50	48	65	66	80	80
	4320	4550	4932	5640	4600	4080	6825	5676	7600	7600
	23	23	22	20	20	25	27	27	30	30
	2505	2210	1870	1800	1600	2500	2835	2700	2850	2940
	42	42	40	36	50	52	60	80	84	87
	2730	2352	2840	2700	4000	5252	5880	7120	6552	5046
	39	39	35	33	33	31	34	39	34	28
	5270	3900	3150	2970	3564	2852	3740	5070	3536	2360
	2	2	2	2	2	2	2	2	2	2
	216	292	220	230	182	184	220	280	280	212
Total	580	580	547	525	567	546	660	713	854	858
	51495	52419	47866	48312	52604	59567	67876	64720	76311	79066
Total, excluding Ky., Md., Va., & W. Va.....	520	520	492	473	515	495	606	653	796	804
	43597	46502	42616	43832	47055	45481	61826	57336	70175	72829

RICE.

State	1909	1910	1911	1912	1913	1914	1915	1916	1917 ¹	1918 ¹
Alabama	1	1	...	...	...	...	...	...	...	1
Arkansas	35	25	6	9	4	6	8	8	11	15
Florida	23	60	72	91	105	93	100	125	152	170
Georgia	1120	2400	2792	3405	3760	3685	4840	6312	6232	7310
Louisiana	1	...	...	...	...	...	...	1	1	1
Mississippi	25	19	18	15	10	10	12	18	21	20
North Carolina.....	4	4	1	1	...	1	1	1	1	1
South Carolina.....	100	88	39	27	16	31	20	16	27	31
Texas	375	371	371	353	405	336	401	443	500	580
Total	12675	12760	11693	11812	11760	10802	13714	20392	15500	17980
	1	3	2	2	1	1	1	2	2	3
	30	84	76	77	42	30	45	53	63	60
	...	1	...	...	...	...	...	...	...	1
	13	27	13	10	7	4	4	6	8	10
	19	17	10	8	5	7	3	3	3	5
	476	357	117	200	147	179	90	49	75	104
	291	265	238	266	203	240	260	235	238	245
	9894	8738	8174	9429	9696	8102	7930	10575	7140	7840
Total	720	722	694	721	819	678	766	810	897	1007
	21368	24507	22928	24984	25451	22849	26663	37429	29077	33388

¹ Estimate from December, 1918, Crop Report.

ACREAGE AND PRODUCTION SINCE 1909—Continued.

PEANUTS.

Acreage (thousands of acres), in heavy figures; production (thousands of bushels), in light figures.

State	1909	1916	1917 ¹	1918 ¹
Alabama	101 1,547	330 9,000	540 13,932	747 17,480
Arkansas	10 169	23 920	18 630	21 546
Florida	126 2,315	10 300	58 2,030	153 5,202
Georgia	160 2,570	40 1,240	255 9,435	362 10,136
Kentucky .....	.....	.....	.....	.....
Louisiana	25 412	.....	4 120	5 108
Maryland .....	.....	.....	.....	.....
Mississippi	14 285	3 75	6 204	5 158
North Carolina	195 5,981	205 6,970	163 7,172	160 7,200
Oklahoma	2 32	11 385	17 544	20 440
South Carolina	8 155	10 450	16 720	14 630
Tennessee	19 547	16 608	15 450	18 684
Texas	64 1,075	275 9,075	600 12,000	647 7,117
Virginia	145 4,284	150 5,400	150 5,250	140 5,880
West Virginia .....	.....	.....	.....	.....
Total	869 19,399	1,043 34,423	1,842 52,487	2,292 55,581

¹ Estimates from December, 1918, Crop Report.

KAFIRS (Grain sorghums, milo maize, feterita).

Acreage (thousands of acres), in heavy figures; production (thousands of bushels), in light figures.

State	1915	1916	1917 ¹	1918 ¹
Texas	1,250 40,000	1,200 26,400	1,284 14,766	1,605 24,075
Oklahoma	1,238 30,950	1,114 7,798	1,400 22,400	1,526 15,260
Total	2,488 70,950	2,314 34,198	2,684 37,166	3,131 39,335

¹ Estimates from December, 1918, Crop Report.

VELVET BEANS.

Acreage¹ (thousands of acres), in heavy figures; production² (thousands of bushels), in light figures.

State	1916	1917	1918
Alabama	1100	1800	1839
Arkansas .....	.....	8140	.....
Florida	4	25	37
Georgia .....	.....	.....	.....
Mississippi .....	.....	500	550
North Carolina .....	.....	2250	.....
South Carolina	370 630	1300 3224	1378
Total	302 20	705 1760	750
.....	84 45	108 75	104
.....	.....	188	160
.....	.....	350	.....
Total	1860 695	4626 15799	4818

¹ Number of acres on which grown.

² Of the area planted in 1917, only 1,946,000 acres were harvested for grain and the production figures apply to the acreage harvested for grain.